

1 This action is in response to the communication filed on 1/29/2008.

2 **DETAILED ACTION**

3 ***Response to Arguments***

4 Applicants' arguments filed 1/29/2008 have been fully considered but they are not  
5 persuasive.

6 In response to applicant's arguments against the references individually, one cannot show  
7 nonobviousness by attacking references individually where the rejections are based on  
8 combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re*  
9 *Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The examiner notes that the  
10 applicants' arguments are silent with respect to the teachings of some of the relied upon prior art.  
11 Further, most of the applicants' arguments appear to only focus on the specific disclosure of  
12 Chou.

13 In response to applicant's argument that the examiner has combined an excessive number  
14 of references, reliance on a large number of references in a rejection does not, without more,  
15 weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18  
16 USPQ2d 1885 (Fed. Cir. 1991). In this case, each reference relied upon in rejecting the claim  
17 limitations provides a modification to Chou based upon the teachings of the relied upon  
18 reference. Each reference also provided motivation for implementing the changes. As such, the  
19 examiner has not used improper hindsight in making the rejections.

20 Regarding applicants' argument that the first key information of Chou is stored in the  
21 recording medium, the examiner does not find the argument persuasive. Chou teaches in Col. 2  
22 Last Paragraph and Col. 3 Paragraph 5 that the transponder which stores the first key information

1 is separate from the recording medium. Further, Chandra renders obvious to store the key in the  
2 recorder instead of in the recording medium. Further still, Chou does not teach away from doing  
3 this, but rather teaches an alternative to storing the key in the recorder. As such, the examiner  
4 does not find the argument persuasive.

5       Regarding applicants' argument that Chou's keys are not recorder specific, the examiner  
6 does not find the argument persuasive. This is due to the same reasoning previously provided,  
7 and further because in the newly presented combination, the  $DK_A$  is stored in the recorder, and as  
8 such is recorder-specific.

9       Regarding applicants' argument that in the combination the second key information  
10 would not be stored in the recording medium, the examiner does not find the argument  
11 persuasive. This is because the relied upon second key information is not a key encrypting key,  
12 as discussed in Chandra, but rather is a frame number of the frame of content which is recorded.  
13 It is taught by Chou to record the frame number with the recorded frame. There are no teachings  
14 relied upon that would suggest recording the frame number in the recorder. This would make no  
15 sense as DVD video contains many frames and storing a random number for each frame of each  
16 DVD recorded would be overwhelming at best, and thus one of ordinary skill in the art would  
17 not be motivated to store the frame numbers in the recorder instead of the recording medium.

18       Regarding applicants' arguments with regards to the newly recited limitations, these  
19 limitations have been addressed in the rejection below, and therefore are not further discussed  
20 herein.

Claims 1-18, and 47-56 have been examined and 19-46 have been cancelled.

All objections and rejections not set forth below have been withdrawn.

### ***Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: In this case, the examiner is unable to find support for the newly recited claim limitations, "a second encryption method different from the first encryption method" and "using recorder-specific characteristic information of the digital signal recorder uniquely identifying the digital signal recorder". Furthermore, the applicants have failed to show where support for these limitations can be found in the specification. See the rejection of claims 1-18 and 47-56 below under 35 USC 112 1<sup>st</sup> Paragraph.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "a second encryption method different from the first encryption method" and "using recorder-specific characteristic information of the digital signal recorder uniquely identifying the digital signal recorder" must be shown or the feature(s) canceled from the claim(s). **No new matter should be entered.**

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

1 must be removed from the replacement sheet, and where necessary, the remaining figures must  
2 be renumbered and appropriate changes made to the brief description of the several views of the  
3 drawings for consistency. Additional replacement sheets may be necessary to show the  
4 renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an  
5 application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"  
6 pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will  
7 be notified and informed of any required corrective action in the next Office action. The  
8 objection to the drawings will not be held in abeyance.

9 ***Claim Rejections - 35 USC § 112***

10 The following is a quotation of the first paragraph of 35 U.S.C. 112:

11 The specification shall contain a written description of the invention, and of the manner and process of making  
12 and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it  
13 pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode  
14 contemplated by the inventor of carrying out his invention.  
15

16 Claims 1-18 and 47-56 are rejected under 35 U.S.C. 112, first paragraph, as failing to  
17 comply with the written description requirement. The claim(s) contains subject matter which  
18 was not described in the specification in such a way as to reasonably convey to one skilled in the  
19 relevant art that the inventor(s), at the time the application was filed, had possession of the  
20 claimed invention. In this case, the examiner is unable to find support for the newly added claim  
21 limitations reciting "a second encryption method different from the first encryption method" and  
22 "using recorder-specific characteristic information of the digital signal recorder uniquely  
23 identifying the digital signal recorder". Furthermore, the applicants have failed to show where  
24 support for these limitations can be found in the specification. As such, one of ordinary skill in  
25 the art would be unable to determine whether or not the applicants were in possession of the

invention, as claimed, at the time of application. Therefore, the claims are rejected for failing to comply with the written description requirement of 35 USC 112 1<sup>st</sup> Paragraph. For purposes of searching and applying prior art, the examiner has assumed that the applicants will be able to show where proper support can be found in the specification for these new limitations.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

Claims 1-6, 13, 47, 49-51, and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou (US Patent Number 6,167,136), in view of Muratani et al. (US Patent Number 6,061,451) hereinafter referred to as Muratani, and further in view of Chandra et al. (US Patent Number 4,814,140) hereinafter referred to as Chandra, and further in view of Wonfor et al. (US Patent Number 6,381,747) hereinafter referred to as Wonfor.

Regarding claim 1, Chou disclosed a digital signal recorder for recording a digital signal on a removable recording medium unit including a recording medium (See Chou Abstract and Fig. 2 Data Medium such as DVD's), comprising: first key information generation unit to generate at least one item of first key information (See Chou Col. 6 Lines 34-38 DK<sub>A</sub>); second key information generation unit to generate at least one item of second key information (See

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1 Chou Col. 6 Lines 39-43 and Col. 7 Paragraph 1; i ); key generation unit which receives said  
2 both of said first and second key information generated by said first key information generation  
3 unit and said second key information generation unit and performs a prescribed arithmetic  
4 operation thereon to generate a key (See Chou Col. 6 Lines 44-58); an encryption circuit which  
5 receives said key and an original data and encrypts said original data with said key using a  
6 second encryption method (See Chou Col. 6 Lines 59-65), and outputs the resulting encrypted  
7 digital signal in a case where said digital signal needs copy protection (See Chou Col. 6 Lines  
8 59-65); and a recording circuit which records, onto said removable recording medium unit, at  
9 least one of said at least one item of second key information generated by said second key  
10 information generation unit, together with said encrypted digital signal in a case where said  
11 digital signal needs copy protection (See Chou Col. 6 Line 66 – Col. 7 Line 5), but Chou failed  
12 to disclose a decrypting circuit which receives a transmitted digital signal encrypted for  
13 protecting said transmitted digital signal using a first encryption method, different from the  
14 second encryption method, and decrypts the transmitted digital signal into the original data,  
15 recording said digital signal without encryption in a case where said digital signal needs no copy  
16 protection, or that the first key information is recorder-specific key information wherein said first  
17 key information as said recorder specific key information is not recorded on any part of said  
18 removable recording medium unit. However, Chou did disclose that the recording medium  
19 could be a DVD, and that the recording medium is separate from the chip disclosed as storing the  
20 first key information ( $DK_A$ ) (See Chou Fig. 2, Fig. 4 and Col. 2 Last Paragraph).

21 Muratani teaches a system in which a network scrambles video data for transmission, and  
22 transmits the data to a receiver, which descrambles the scrambled video data to get video data

(original data) which is then recorded onto DVD for later viewing (See Muratani Col. 17 Paragraphs 2-5). Muratani further teaches that the scramble algorithm can be easily updated (See Muratani Cols. 12-13 Third Embodiment).

Chandra teaches that in order to provide an apparatus with the right to execute encrypted content, the decryptor can be provided with the key decryption key during manufacture (See Chandra Col. 7 Lines 7-13).

Wonfor teaches that not all data needs to be copy protected and teaches a system that turns off copy protection when it is not needed (See Wonfor Col. 2 Line 66 – Col. 3 Line 7 and Col. 12 Table 2).

It would have been obvious to the ordinary person skilled in the art at the time of invention to employ the teachings of Muratani in the DVD copy protection system of Chou, by providing the content to the recorder in the manner taught by Muratani. This would have been obvious because the ordinary person skilled in the art would have been motivated to protect the recorded digital data from being illicitly copied. In this combination, it is further obvious that the first and second encryption methods are different. This is due to the fact that the encryption method of Chou (the second encryption method) is not disclosed as changing, while the encryption method of Muratani (the first encryption method) is disclosed as changing, and therefore either the pre-change algorithm or the post change algorithm must be different from that of Chou.

It would have been obvious to the ordinary person skilled in the art at the time of invention to employ the teachings of Chandra in the encrypted content system by providing the key encryption/decryption key to the player during manufacture of the player. This would have

1 been obvious because the ordinary person skilled in the art would have been motivated to  
2 provide the right to execute the content to only those recorders which contain the proper key  
3 decryption key. Furthermore, in this combination, it would be obvious to the ordinary person  
4 skilled in the art at the time of invention that the key decryption key (DK<sub>A</sub>) would not be  
5 provided in the recording medium because it would already be available in the recorder.

6 It further would have been obvious to the ordinary person skilled in the art at the time of  
7 invention to employ the teachings of Wonfor in the copy protection system of Chou by only  
8 scrambling the data that needed copy protection and not scrambling the data that didn't need  
9 copy protection. This would have been obvious because the ordinary person would have been  
10 motivated to prevent unnecessary processing to copy protect data that did not need it.

11 Regarding claim 49, Chou disclosed a digital signal recorder for recording a digital signal  
12 on a removable recording medium unit including a recording medium (See Chou Abstract and  
13 Fig. 2 Data Medium such as DVD's), comprising: first key information generation unit to  
14 generate at least one item of first key information (See Chou Col. 6 Lines 34-38 DK<sub>A</sub>); second  
15 key information generation unit to generate at least one item of second key information (See  
16 Chou Col. 6 Lines 39-43 and Col. 7 Paragraph 1; i); key generation unit which receives said  
17 both of said first and second key information generated by said first key information generation  
18 unit and said second key information generation unit and performs a prescribed arithmetic  
19 operation thereon to generate a key (See Chou Col. 6 Lines 44-58); an encryption circuit which  
20 receives said key and an original data and encrypts said original data with said key (See Chou  
21 Col. 6 Lines 59-65), and outputs the resulting encrypted digital signal in a case where said digital  
22 signal needs copy protection (See Chou Col. 6 Lines 59-65); and a recording circuit which



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1 records, onto said removable recording medium unit, at least one of said at least one item of  
2 second key information generated by said second key information generation unit, together with  
3 said encrypted digital signal in a case where said digital signal needs copy protection (See Chou  
4 Col. 6 Line 66 – Col. 7 Line 5), but Chou failed to disclose a decrypting circuit which receives  
5 an encrypted digital signal and decrypts the encrypted digital signal into the original data,  
6 recording said digital signal without encryption in a case where said digital signal needs no copy  
7 protection, or that the first key information is generated using recorder specific characteristic  
8 information of the digital signal recorder uniquely identifying the digital signal recorder, wherein  
9 said first key information as said recorder specific key information is not carried with any part of  
10 the removable recording medium unit. However, Chou did disclose that the recording medium  
11 could be a DVD, and that the recording medium is separate from the chip disclosed as storing the  
12 first key information (DK<sub>A</sub>) (See Chou Fig. 2, Fig. 4 and Col. 2 Last Paragraph).

13 Muratani teaches a system in which a network scrambles video data for transmission, and  
14 transmits the data to a receiver, which descrambles the scrambled video data to get video data  
15 (original data) which is then recorded onto DVD for later viewing (See Muratani Col. 17  
16 Paragraphs 2-5). Muratani further teaches that the scramble algorithm can be easily updated  
17 (See Muratani Cols. 12-13 Third Embodiment).

18 Chandra teaches that in order to provide an apparatus with the right to execute encrypted  
19 content, the decryptor can be provided with the key decryption key during manufacture (See  
20 Chandra Col. 7 Lines 7-13).

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1           Wonfor teaches that not all data needs to be copy protected and teaches a system that  
2 turns off copy protection when it is not needed (See Wonfor Col. 2 Line 66 – Col. 3 Line 7 and  
3 Col. 12 Table 2).

4           It would have been obvious to the ordinary person skilled in the art at the time of  
5 invention to employ the teachings of Muratani in the DVD copy protection system of Chou, by  
6 providing the content to the recorder in the manner taught by Muratani. This would have been  
7 obvious because the ordinary person skilled in the art would have been motivated to protect the  
8 recorded digital data from being illicitly copied. In this combination, it is further obvious that  
9 the first and second encryption methods are different. This is due to the fact that the encryption  
10 method of Chou (the second encryption method) is not disclosed as changing, while the  
11 encryption method of Muratani (the first encryption method) is disclosed as changing, and  
12 therefore either the pre-change algorithm or the post change algorithm must be different from  
13 that of Chou.

14           It would have been obvious to the ordinary person skilled in the art at the time of  
15 invention to employ the teachings of Chandra in the encrypted content system by providing the  
16 key encryption/decryption key to the player during manufacture of the player. This would have  
17 been obvious because the ordinary person skilled in the art would have been motivated to  
18 provide the right to execute the content to only those recorders which contain the proper key  
19 decryption key. Furthermore, in this combination, it would be obvious to the ordinary person  
20 skilled in the art at the time of invention that the key decryption key ( $DK_A$ ) would not be  
21 provided in the recording medium because it would already be available in the recorder. Further,  
22 in this combination, because the key decrypting key would be known only to those devices into

1 which the manufacturer placed the key decrypting key, this is data is specific to the recorder  
2 which contain it, and also uniquely identifies the digital signal recorders which can decrypt using  
3 that key.

4 It further would have been obvious to the ordinary person skilled in the art at the time of  
5 invention to employ the teachings of Wonfor in the copy protection system of Chou by only  
6 scrambling the data that needed copy protection and not scrambling the data that didn't need  
7 copy protection. This would have been obvious because the ordinary person would have been  
8 motivated to prevent unnecessary processing to copy protect data that did not need it.

9 Regarding claim 2, Chou, Muratani, Chandra, and Wonfor disclosed that said second key  
10 information generation unit generates said second key information by using a random number  
11 generator (See Chou Col. 7 Paragraph 1), and said digital signal has a packet format of a  
12 prescribed length (See Chou Col. 6 Lines 17-23).

13 Regarding claim 3, Chou, Muratani, Chandra, and Wonfor disclosed that said second key  
14 information generation unit generates said second key information by using a random number  
15 generator (See Chou Col. 7 Paragraph 1), the second key information generation unit has a  
16 function for updating said at least one item of said second key information at a prescribed time  
17 interval (See Chou Col. 5 Lines 34-39, Col. 6 Lines 59-61 and 7 Lines 2-5); and said recording  
18 circuit has a function for recording information capable of identifying timing when said second  
19 key information generation unit updates said key information (See Chou Col. 5 Lines 43-48).

20 Regarding claim 4, Chou, Muratani, Chandra, and Wonfor disclosed that said digital  
21 signal has a packet format of a prescribed length (See Chou Col. 5 Lines 34-39); and said  
22 recording circuit has a function for adding identifying information capable of identifying timing

1 where said second key information generation unit updates said second key information, and  
2 where said identifying information is added to packets of said digital signal and recorded on said  
3 removable recording medium unit (See Chou Col. 5 Paragraph 4 and Col. 6 Paragraph 5 and Col.  
4 7 Paragraph 1).

5       Regarding claim 5, Chou, Muratani, Chandra, and Wonfor disclosed that said second key  
6 information generation unit generates said second key information by using a random number  
7 generator (See Chou Col. 7 Paragraph 1), said encryption circuit has a function capable of  
8 selecting between a first function for encrypting and outputting said digital signal, and a second  
9 function for outputting said digital signal as is without encryption (See the rejection of claim 1  
10 above); and said recording circuit has a function for recording, in a prescribed area on said  
11 removable recording medium unit, encryption flag information indicating whether or not said  
12 digital signal is encrypted, and, when not encrypted, not recording said second key information  
13 (See Wonfor Col. 8 Lines 17-23 and Table 2).

14       Regarding claim 6, Chou, Muratani, Chandra, and Wonfor disclosed that said digital  
15 signal has a packet format of a prescribed length (See Chou Col. 5 Lines 34-39); and said  
16 recording circuit has a function for adding encryption flag information indicating whether or not  
17 said digital signal is encrypted, to packets of said digital signal, and a function for recording on  
18 said removable recording medium unit (See Wonfor Col. 8 Lines 17-23 and Table 2).

19       Regarding claim 47, Chou, Muratani, Chandra, and Wonfor disclosed that the first key  
20 information is pre-stored in said recorder at a time when said recorder is manufactured (See  
21 Chandra Col. 7 Lines 7-13).

1           Regarding claims 50-51 and 54-55, Chou, Muratani, Chandra, and Wonfor disclosed that  
2   said first key information is recorder-specific key information, in that said first key information  
3   is derived from an attribute of said digital signal recorder (See the teachings of Chandra, wherein  
4   the first key information is retrieved from the recorder [derived from an attribute of the  
5   recorder]), and is unrelated to any attribute of any part of said removable recording medium unit  
6   (See the rejection of claim 47 above wherein  $DK_A$  is pre-stored in the recorder prior to recording  
7   to any medium).

8           Regarding claim 56, Chou, Muratani, Chandra, and Wonfor disclosed that said encrypted  
9   digital signal is encrypted using a first encryption method, and wherein said encrypting circuit  
10   encrypts said original data with said key using a second encryption method different from said  
11   first encryption method (See the rejection of claim 49 above).

12           Claims 7-12, 14-17, 48, and 52-53 are rejected under 35 U.S.C. 103(a) as being  
13   unpatentable over the combination of Chou, Muratani, Chandra, and Wonfor, as applied to claim  
14   1 above, and further in view of Kim (US Patent Number 6,466,733).

15           Regarding claim 7, the combination of Chou, Muratani, Chandra, and Wonfor disclosed a  
16   digital signal recorder in which a digital signal of a packet format of a prescribed length is input  
17   comprising: a decrypting circuit which receives a transmitted digital signal encrypted for  
18   protecting said transmitted digital signal using a first encryption method, and decrypts the  
19   transmitted digital signal into an original signal; first key information generation unit to generate  
20   at least one item of first key information which is recorder specific key information; second key  
21   information generation unit to generate at least one item of second key information; key  
22   generation unit to receive both of said first and second key information generated by said first

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1 key information generation unit and said second key information generation unit, and perform a  
2 prescribed arithmetic operation to generate a key; an encryption circuit which receives said key  
3 and said original signal, encrypts said original signal with said key using a second encryption  
4 method different from said first encryption method, and outputs the resulting encrypted digital  
5 signal in a case where said digital signal needs copy protection; and a recording circuit which  
6 records, onto said removable recording medium unit (data medium), at least one of said at least  
7 on item of second key information generated by said second key information generation unit,  
8 together with said encrypted digital signal in a case where said digital signal needs copy  
9 protection, and records said digital signal without encryption in a case where said digital signal  
10 needs no copy protection, and wherein said first key information as said recorder-specific key  
11 information, is not recorded on any part of said removable recording medium unit (See rejection  
12 of claims 1-2 above), but failed to disclose dividing the signal into other prescribed lengths; a  
13 synchronization signal, recording information signal, auxiliary information signal, and first error  
14 correction code are added thereto to define a block format; one track is formed by a prescribed  
15 number of blocks thus made; a second error correction code is added in units of n tracks (where n  
16 is an integer 1 or greater); said second error correction code is also divided and said first error  
17 correction code is added thereto to constitute a block format; and said tracks are recorded on said  
18 removable recording medium unit.

19 Kim teaches a method for recording a digital transport stream by creating tracks from  
20 video packets and providing three error correction codes to each track (See Kim Figs. 2, 3, and 5  
21 and Col. 6 Paragraphs 4-7 and Col. 7 Paragraphs 3-4).

1           It would have been obvious to the ordinary person skilled in the art at the time of  
2   invention to employ the teachings of Kim in the recorder of Chou, Muratani, Chandra, and  
3   Wonfor by storing the encrypted packets in the ECC block format of Kim. This would have  
4   been obvious because the ordinary person skilled in the art would have been motivated to protect  
5   the stored programs against errors.

6           Regarding claim 8, see the rejection of claim 1 above wherein it would have been  
7   obvious to store the frame identification number in an auxiliary storage area because the frame  
8   identification number is auxiliary data.

9           Regarding claim 9, see the rejection of claim 3 above.

10          Regarding claim 10, Chou, Muratani, Chandra, Wonfor, and Kim disclosed that timing  
11   information was included in the stored block data (see Kim Col. 5 Paragraph 6).

12          Regarding claim 11, Chou, Muratani, Chandra, Wonfor, and Kim disclosed that timing  
13   information was stored in an auxiliary section (See Kim Col. 6 Paragraph 4 and Col. 7 Paragraph  
14   3).

15          Regarding claim 12, Chou, Muratani, Chandra, Wonfor, and Kim disclosed adding timing  
16   information to the blocks identifying the timing of the packets (See Kim Col. 2 Lines 54-57)

17          Regarding claim 13, Chou, Muratani, Chandra, Wonfor, and Kim disclosed that the frame  
18   identification number was updated every frame and there was at least one frame per track (See  
19   Chou Col. 5 Paragraph 4). Therefore, the frame identification number was updated for every  
20   track.

21          Regarding claim 14, see the rejection of claim 7 above.

22          Regarding claim 15-17, see the rejection of claims 5-6 above.

1           Regarding claim 47, Chou, Muratani, Chandra, Wonfor, and Kim disclosed that the first  
2   key information is pre-stored in said recorder at a time when said recorder is manufactured (See  
3   Chandra Col. 7 Lines 7-13).

4           Regarding claims 52-53, Chou, Muratani, Chandra, Wonfor, and Kim disclosed that said  
5   first key information is recorder-specific key information, in that said first key information is  
6   derived from an attribute of said digital signal recorder (See the teachings of Chandra, wherein  
7   the first key information is retrieved from the recorder [derived from an attribute of the  
8   recorder]), and is unrelated to any attribute of any part of said removable recording medium unit  
9   (See the rejection of claim 47 above wherein  $DK_A$  is pre-stored in the recorder prior to recording  
10   to any medium).

11  
12           Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination  
13   of Chou, Muratani, Chandra, Wonfor, and Kim, as applied to claim 14 above, and further in view  
14   of Yuval et al. (US Patent Number 5,586,186) hereinafter referred to as Yuval.

15           The combination of Chou, Muratani, Chandra, Wonfor, and Kim disclosed encrypting  
16   certain data and not other data, (See the rejection of claim 7 above), but failed to disclose  
17   switching to determine whether or not to encrypt every  $n$  tracks.

18           Yuval teaches that for efficiency, only every  $n$ th track should be encrypted (See Yuval  
19   Col. 6 Lines 13-23).

20           It would have been obvious to the ordinary person skilled in the art at the time of  
21   invention to employ the teachings of Yuval in the copy protection system of Chou, Muratani,  
22   Chandra, Wonfor, and Kim by encrypting every  $n$ th track. This would have been obvious



1 because the ordinary person skilled in the art would have been motivated to make the copy  
2 protection system more efficient in both the encryption and decryption.

3 ***Conclusion***

4 Claims 1-18, and 47-56 have been rejected.

5 Applicant's amendment necessitated the new ground(s) of rejection presented in this  
6 Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).  
7 Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

8 A shortened statutory period for reply to this final action is set to expire THREE  
9 MONTHS from the mailing date of this action. In the event a first reply is filed within TWO  
10 MONTHS of the mailing date of this final action and the advisory action is not mailed until after  
11 the end of the THREE-MONTH shortened statutory period, then the shortened statutory period  
12 will expire on the date the advisory action is mailed, and any extension fee pursuant to 37  
13 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,  
14 however, will the statutory period for reply expire later than SIX MONTHS from the date of this  
15 final action.

16 Any inquiry concerning this communication or earlier communications from the  
17 examiner should be directed to 11 whose telephone number is (571)272-3790. The examiner can  
18 normally be reached on M-F 8-4.

19 If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
20 supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the  
21 organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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